FIG. 1

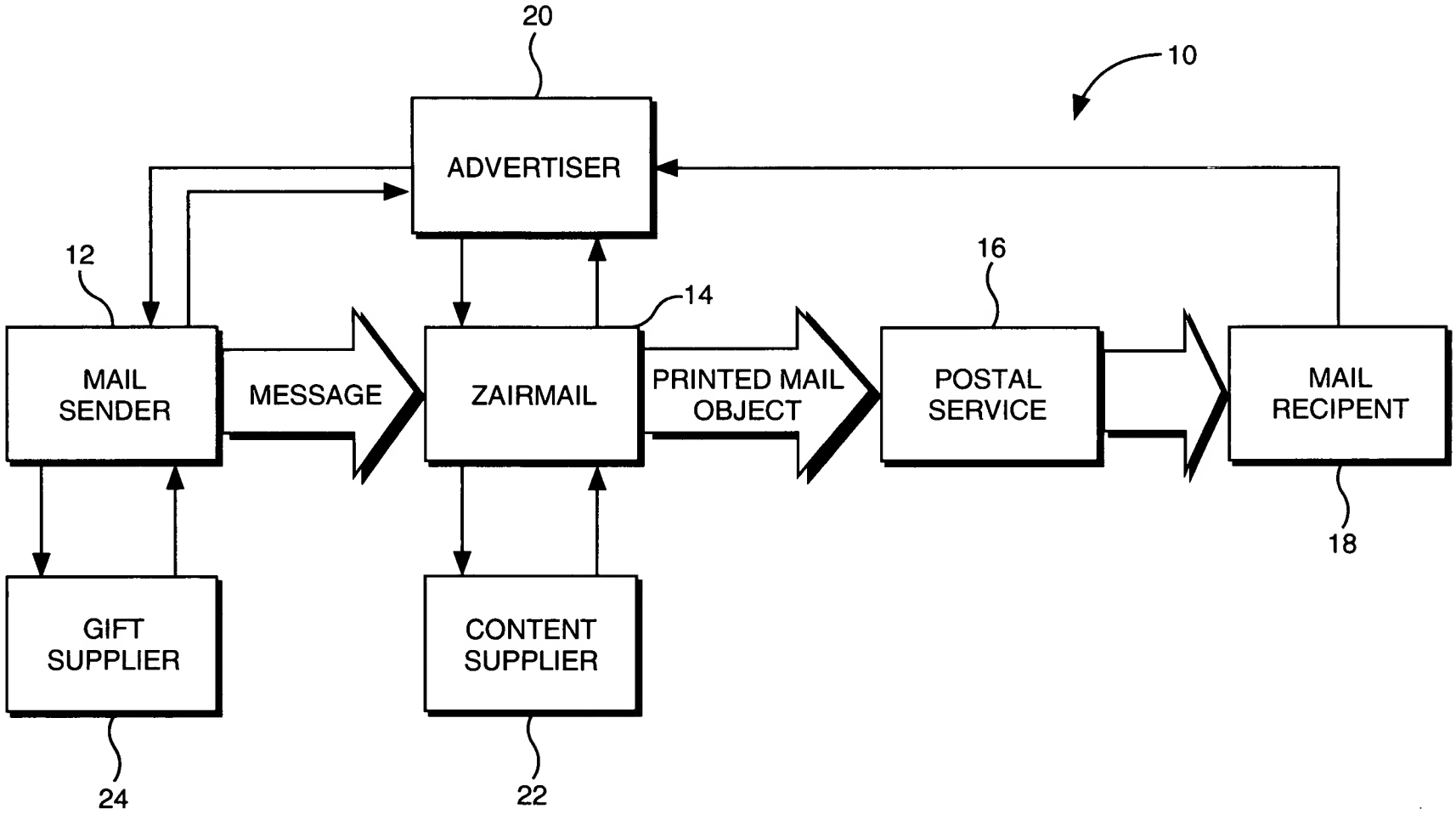

20
10
ADVERTISER
12
16
14
MAIL SENDER
MESSAGE
ZAIRMAIL
PRINTED MAIL OBJECT
POSTAL SERVICE
MAIL RECIPENT
18
GIFT SUPPLIER
CONTENT SUPPLIER
24
22

FIG. 2

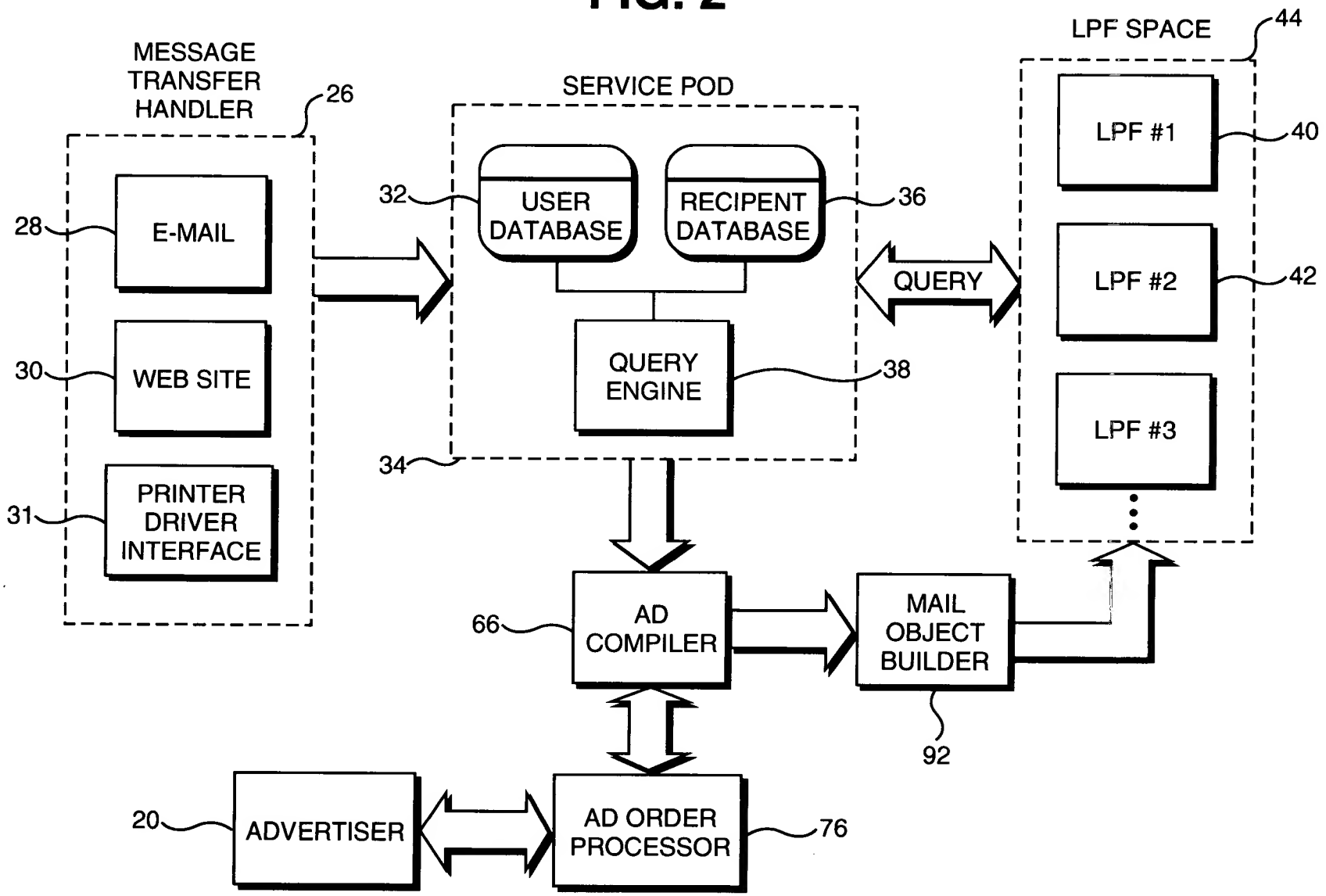

MESSAGE TRANSFER HANDLER
26
28
E-MAIL
30
WEB SITE
31
PRINTER DRIVER INTERFACE
SERVICE POD
32
USER DATABASE
RECIPENT DATABASE
36
QUERY ENGINE
38
34
QUERY
LPF SPACE
44
LPF #1
40
LPF #2
42
LPF #3
66
AD COMPILER
MAIL OBJECT BUILDER
92
20
ADVERTISER
AD ORDER PROCESSOR
76

FIG. 3

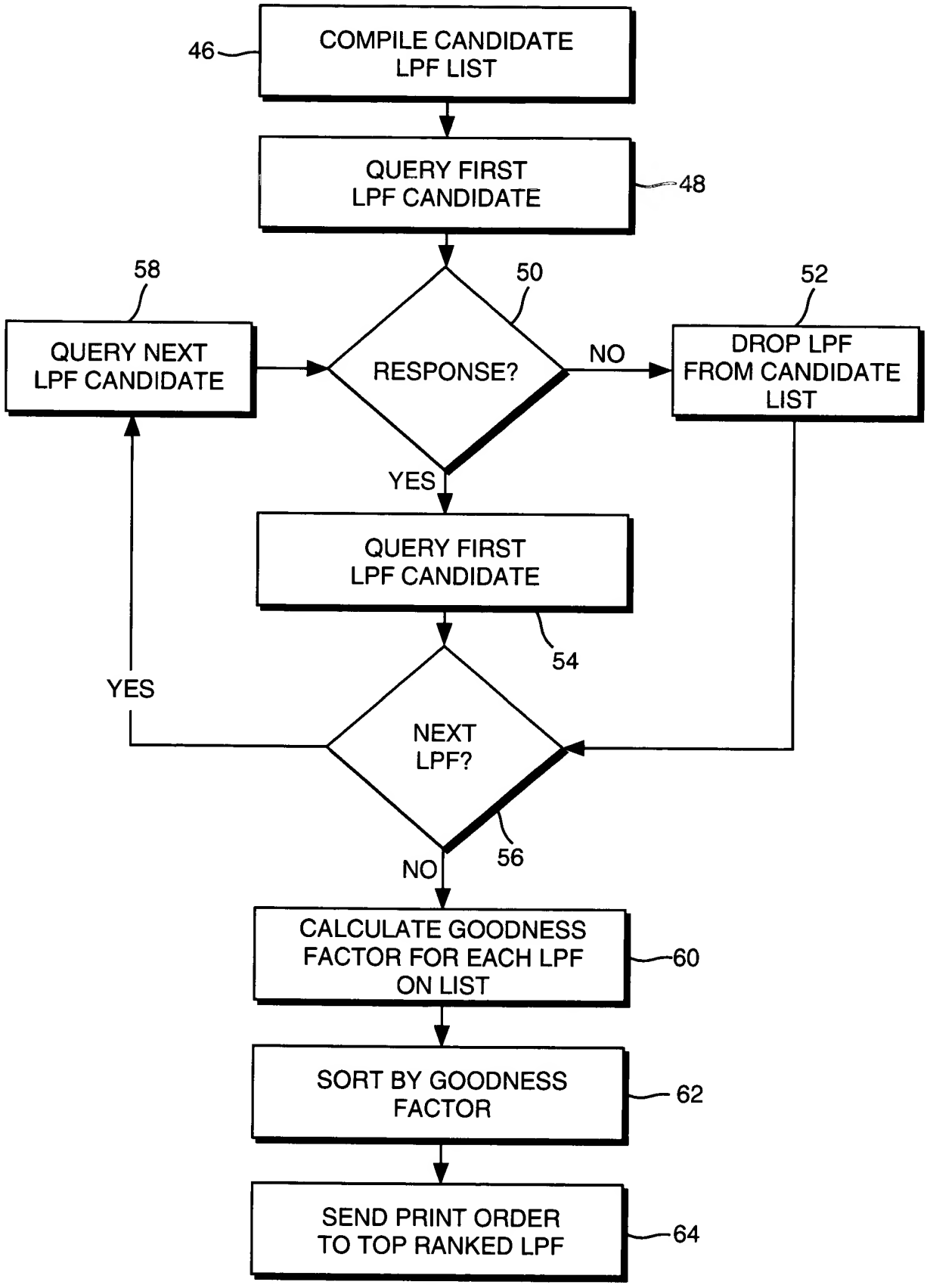

46
COMPILE CANDIDATE LPF LIST
QUERY FIRST LPF CANDIDATE
48
58
50
52
QUERY NEXT LPF CANDIDATE
RESPONSE?
NO
DROP LPF FROM CANDIDATE LIST
YES
QUERY FIRST LPF CANDIDATE
54
YES
NEXT LPF?
56
NO
CALCULATE GOODNESS FACTOR FOR EACH LPF ON LIST
60
SORT BY GOODNESS FACTOR
62
SEND PRINT ORDER TO TOP RANKED LPF
64

FIG. 4

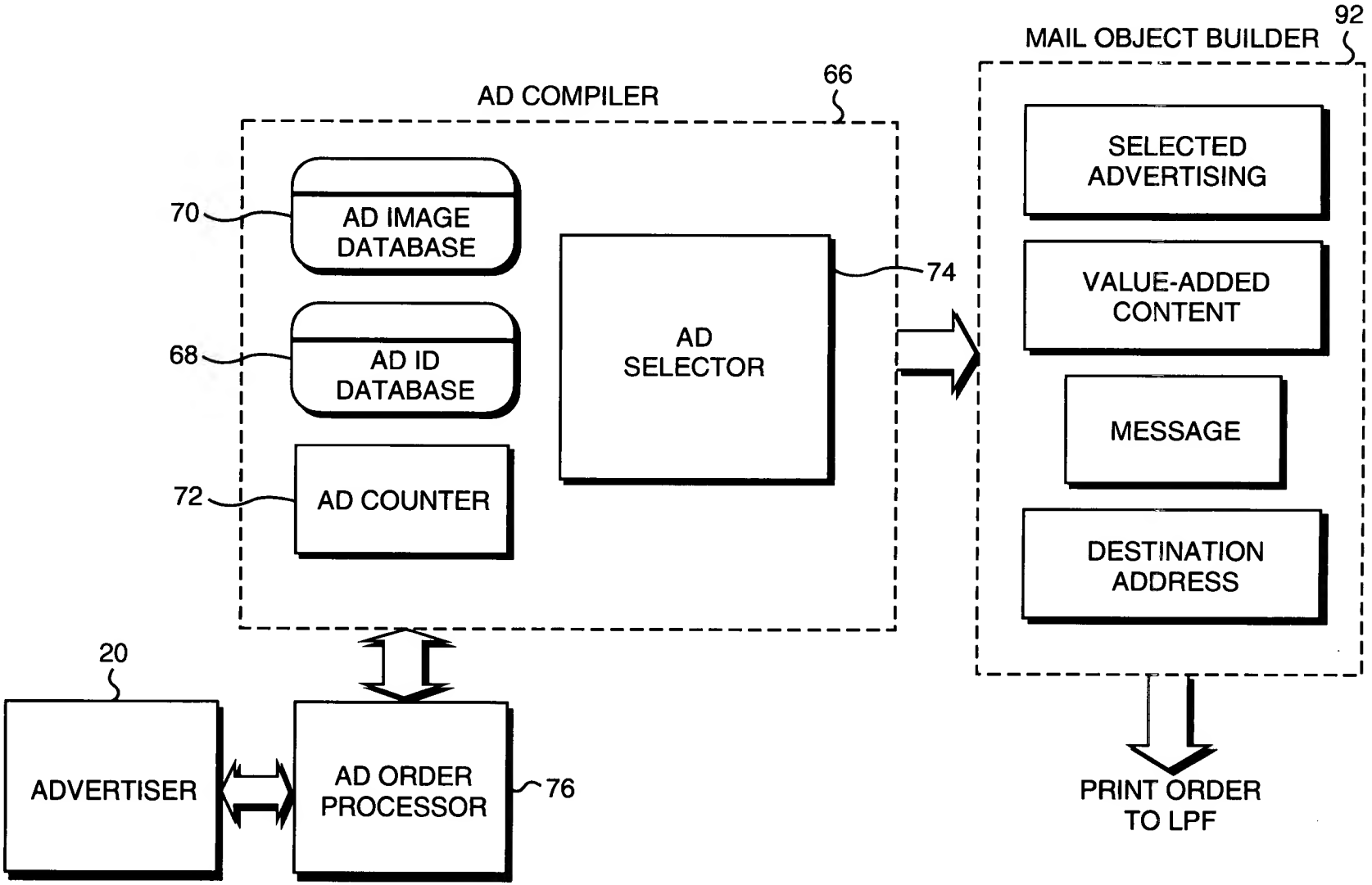

MAIL OBJECT BUILDER
92
AD COMPILER
66
SELECTED ADVERTISING
70
AD IMAGE DATABASE
74
AD SELECTOR
VALUE-ADDED CONTENT
68
AD ID DATABASE
MESSAGE
72
AD COUNTER
DESTINATION ADDRESS
20
ADVERTISER
AD ORDER PROCESSOR
76
PRINT ORDER TO LPF

FIG. 5

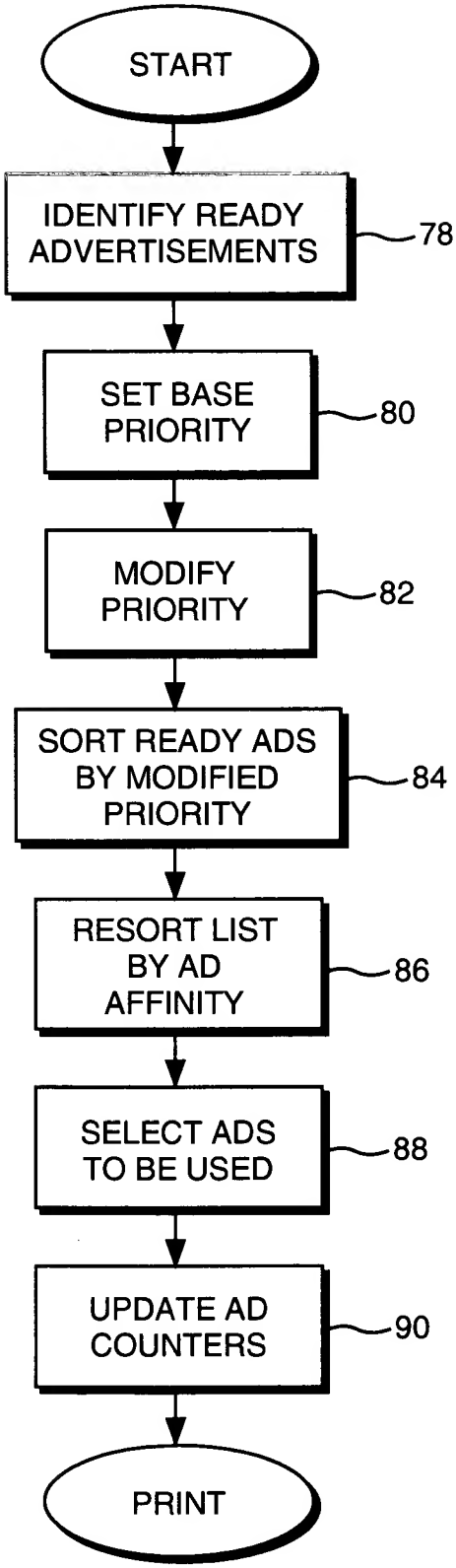

START
IDENTIFY READY ADVERTISEMENTS
78
SET BASE PRIORITY
80
MODIFY PRIORITY
82
SORT READY ADS BY MODIFIED PRIORITY
84
RESORT LIST BY AD AFFINITY
86
SELECT ADS TO BE USED
88
UPDATE AD COUNTERS
90
PRINT

FIG. 6A

AD LIST
(BASE PRIORITY)

1. CREDIT CARD AD
2. RENTAL CARD AD
3. AIRLINE TRAVEL AD
4. SOFTDRINK AD
5. CIGARETTES AD
6. VIDEOGAME AD
7. CLOTHES STORE #1 AD
8. COTHES STORE #2 AD

FIG. 6B

16 YEAR OLD MALE

AD LIST
(SORTED)

1. VIDEOGAMES AD
2. SOFTDRINK AD
3. CLOTHES STORE #2 AD
4. CLOTHES STORE #1 AD
5. VIDEOGAMES #2 AD
6. RESTAURANT AD
7. CAR AD
8. COMPUTER AD

FIG. 6C

AD LIST
(REORDERED)

1. VIDEOGAMES AD
2. SOFTDRINK AD
3. CLOTHES STORE #2 AD
4. VIDEOGAMES #2 AD
5. RESTAURANT AD
6. CAR AD
7. COMPUTER AD
8. CAR #2 AD

FIG. 6D

35 YEAR OLD FEMALE

AD LIST
(SORTED #2)

1. CLOTHES STORE #1 AD
2. CLOTHES STORE #2 AD
3. CREDIT CARD AD
4. MAKEUP AD
5. JEWELRY AD
6. LONG DISTANCE PHONE SVC. AD
7. CIGARETTES AD
8. AIRLINE TRAVEL AD

FIG. 6E

AD LIST
(REORDERED #2)

1. CLOTHES STORE #1 AD
2. CREDIT CARD AD
3. MAKEUP AD
4. JEWELRY AD
5. LONG DISTANCE PHONE AD
6. CIGARETTES AD
7. AIRLINE TRAVEL AD
8. SHOES AD

FIG. 7A

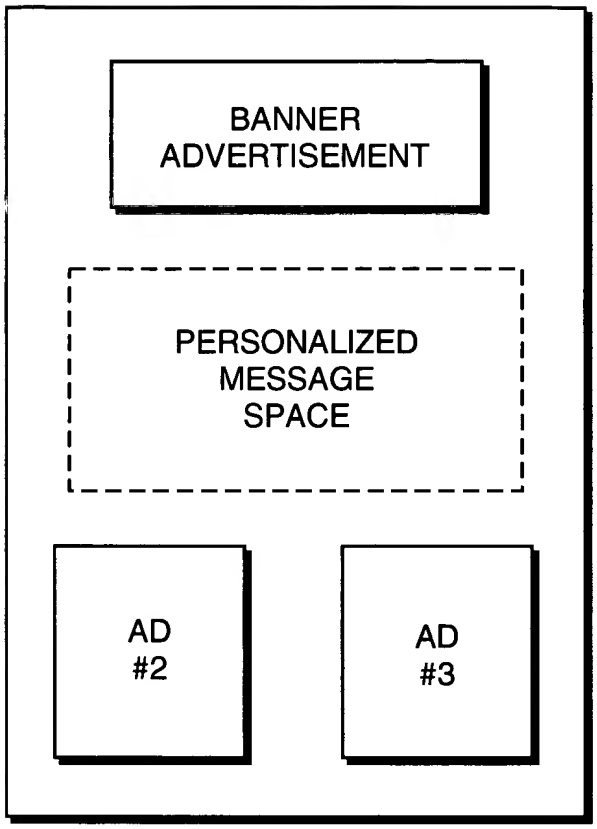


FIG. 7B

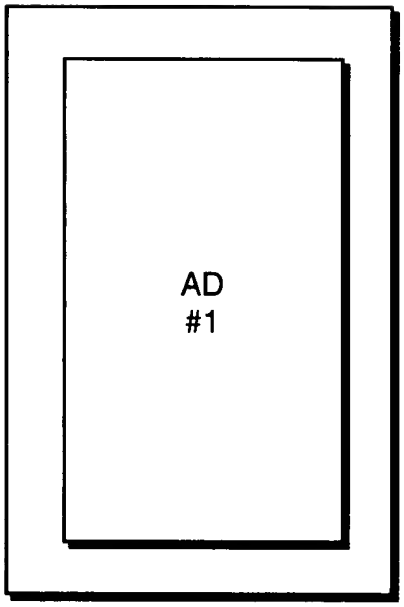


FIG. 7C

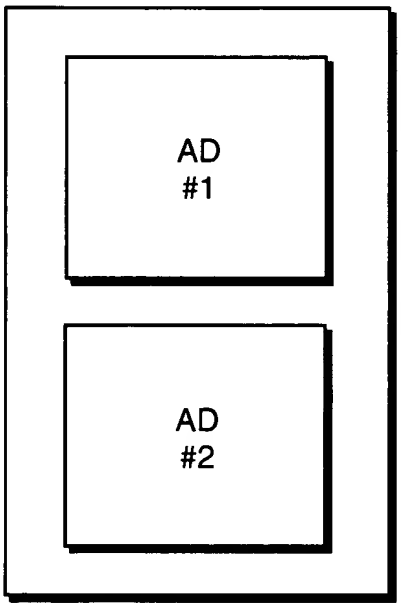


FIG. 7D

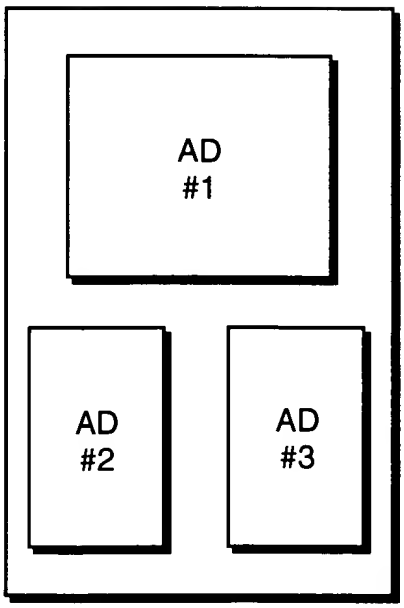


FIG. 8

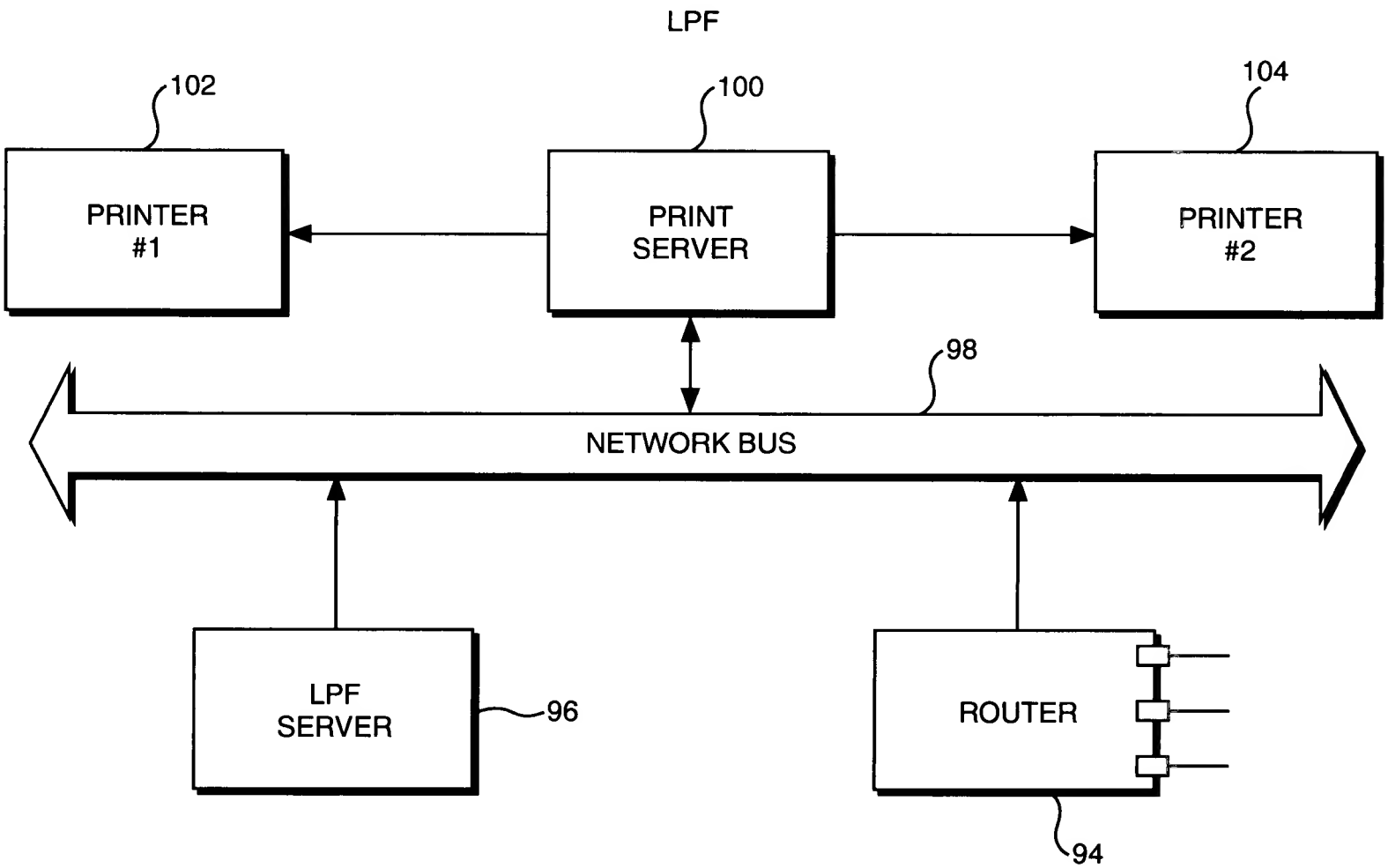

LPF
102
100
104
PRINTER #1
PRINT SERVER
PRINTER #2
98
NETWORK BUS
LPF SERVER
96
ROUTER
94

FIG. 9A

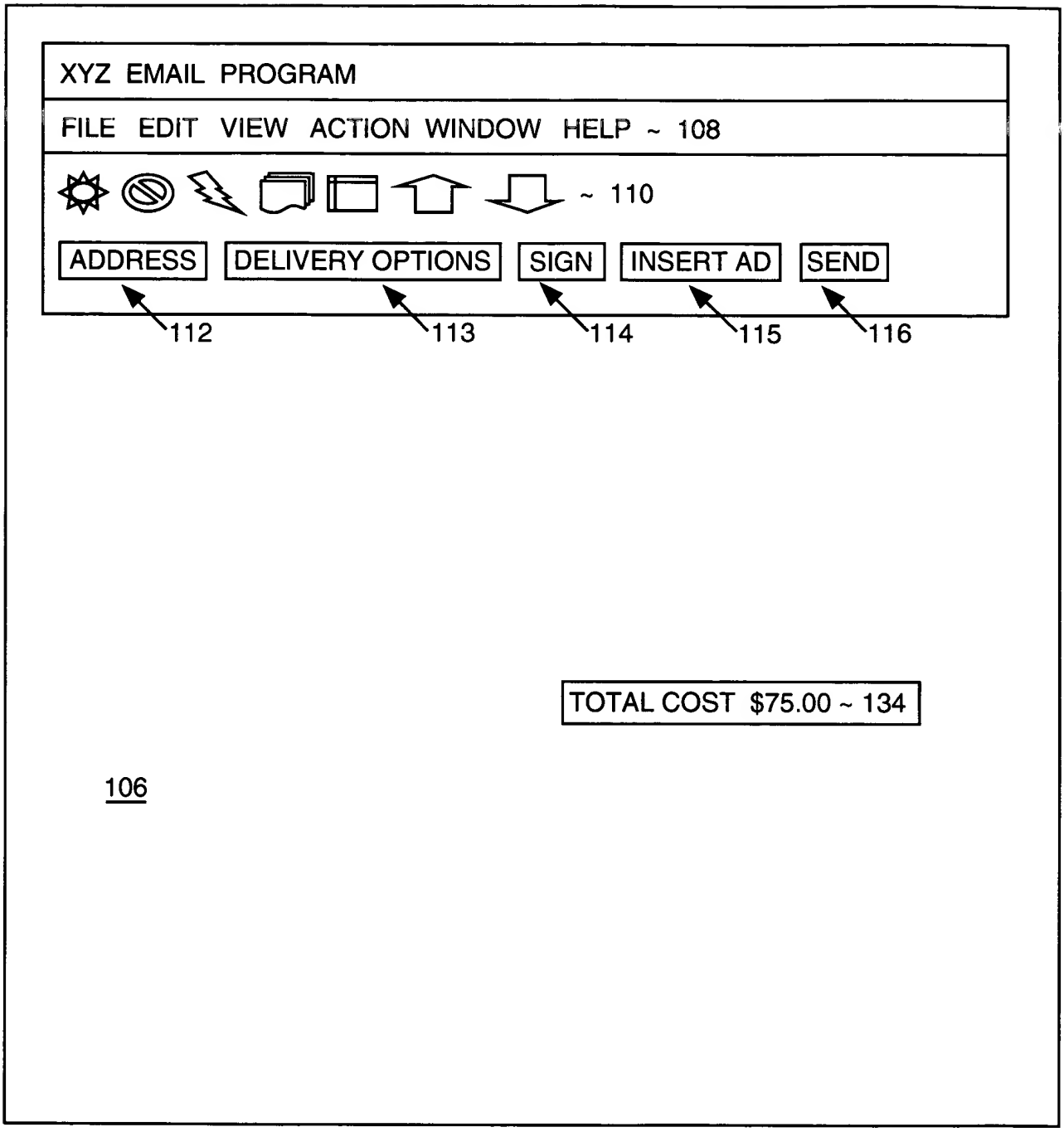

XYZ EMAIL PROGRAM
FILE EDIT VIEW ACTION WINDOW HELP ~ 108
~ 110
ADDRESS
DELIVERY OPTIONS
SIGN
INSERT AD
SEND
112
113
114
115
116
TOTAL COST $75.00 ~ 134
106

FIG. 9B

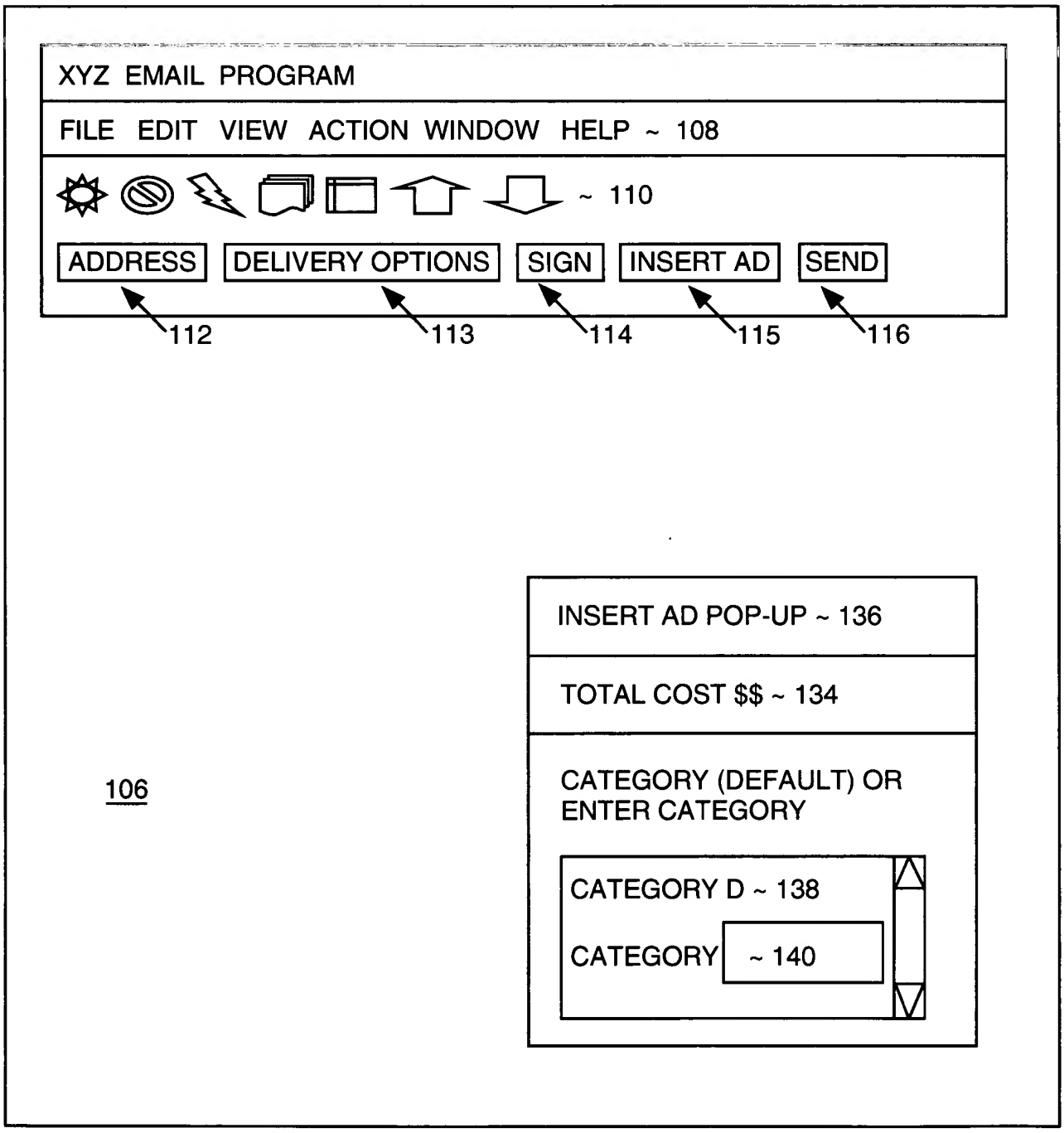

XYZ EMAIL PROGRAM
FILE EDIT VIEW ACTION WINDOW HELP ~ 108
~ 110
ADDRESS
DELIVERY OPTIONS
SIGN
INSERT AD
SEND
112
113
114
115
116
106
INSERT AD POP-UP ~ 136
TOTAL COST $$ ~ 134
CATEGORY (DEFAULT) OR ENTER CATEGORY
CATEGORY D ~ 138
CATEGORY
~ 140

FIG. 9C

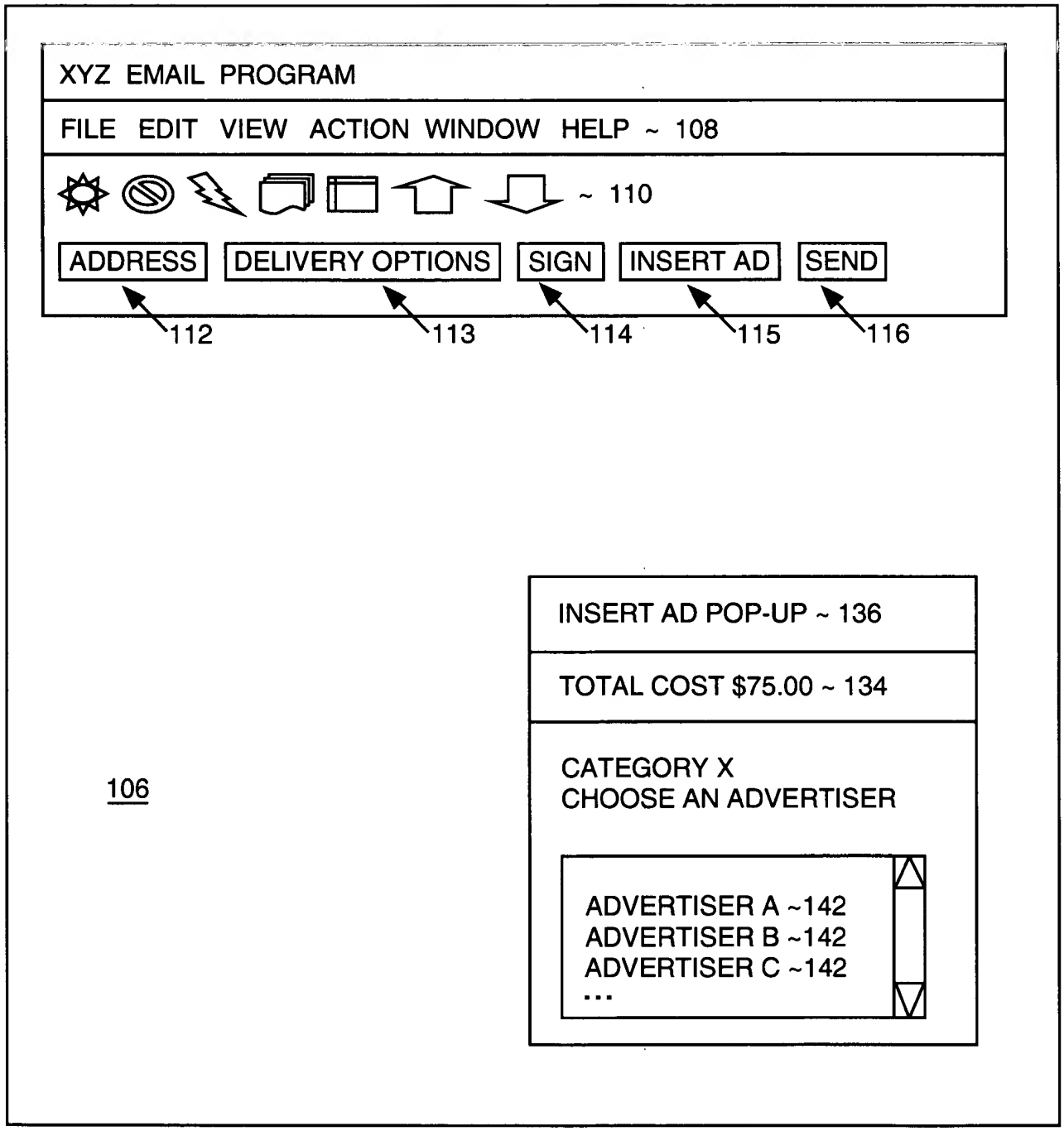

XYZ EMAIL PROGRAM
FILE EDIT VIEW ACTION WINDOW HELP ~ 108
~ 110
ADDRESS
DELIVERY OPTIONS
SIGN
INSERT AD
SEND
112
113
114
115
116
106
INSERT AD POP-UP ~ 136
TOTAL COST $75.00 ~ 134
CATEGORY X
CHOOSE AN ADVERTISER
ADVERTISER A ~142
ADVERTISER B ~142
ADVERTISER C ~142
...

FIG. 9D

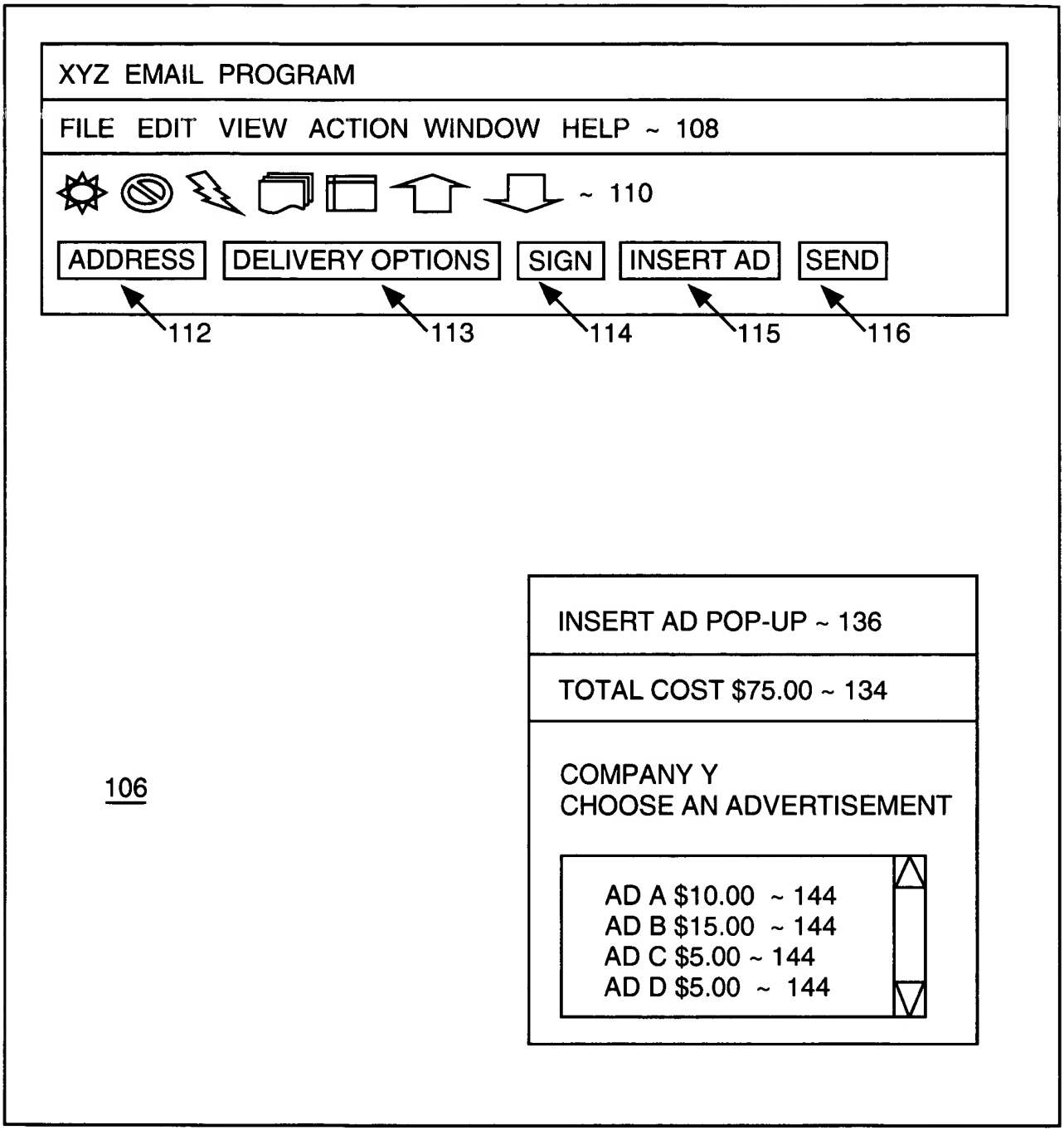

XYZ EMAIL PROGRAM
FILE EDIT VIEW ACTION WINDOW HELP ~ 108
~ 110
ADDRESS
DELIVERY OPTIONS
SIGN
INSERT AD
SEND
112
113
114
115
116
INSERT AD POP-UP ~ 136
TOTAL COST $75.00 ~ 134
COMPANY Y
CHOOSE AN ADVERTISEMENT
AD A $10.00 ~ 144
AD B $15.00 ~ 144
AD C $5.00 ~ 144
AD D $5.00 ~ 144
106

FIG. 9E

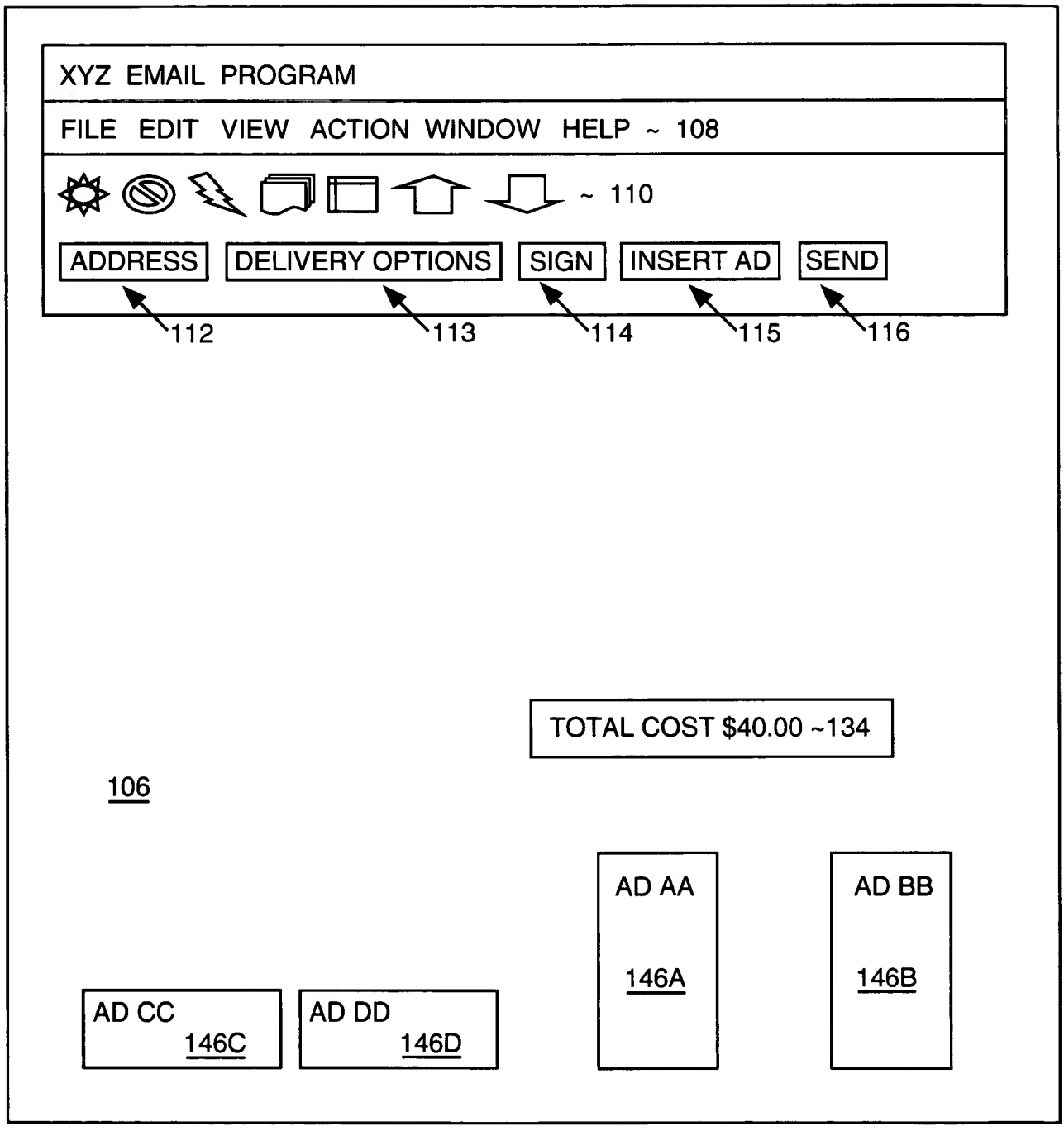

XYZ EMAIL PROGRAM
FILE EDIT VIEW ACTION WINDOW HELP ~ 108
~ 110
ADDRESS
DELIVERY OPTIONS
SIGN
INSERT AD
SEND
112
113
114
115
116
TOTAL COST $40.00 ~134
106
AD AA
146A
AD BB
146B
AD CC
146C
AD DD
146D

FIG. 10

ADDRESS TABLE ~ 148

ADDRESSEE GROUP NAME ~ 150	NUMBER IN GROUP ~ 150	EMAIL ADDRESSES ~ 154	OTHER CONVENTIONAL ADDRESS TABLE DATA, PHYSICAL MAILING ADDRESS, ETC. ~ 156	ATTRIBUTES-INTEREST, DEMOGRAPHIC DATA, ETC. RELATED TO GROUP ~ 158	COSTS ASSOCIATED W/ MAILING TO GROUP ~160
PATIENTS	100			PARENTS OF CHILDREN	$75.00
CHRISTMAS	75			FAMILY AND FRIENDS	$200.00

FIG. 11

CATEGORY TABLE ~ 162

CATEGORY ID ~ 164	DEFAULT OR ENTERED ~ 166	CATEGORY DESCRIPTION ~ 168	OTHER DATA ~ 170
PARENTS	PEDIATRICS	PARENTS OF CHILDREN / HEALTHCARE	
CHRISTMAS	CHRISTMAS	CHRISTMAS / NEW YEAR / HOLIDAYS	

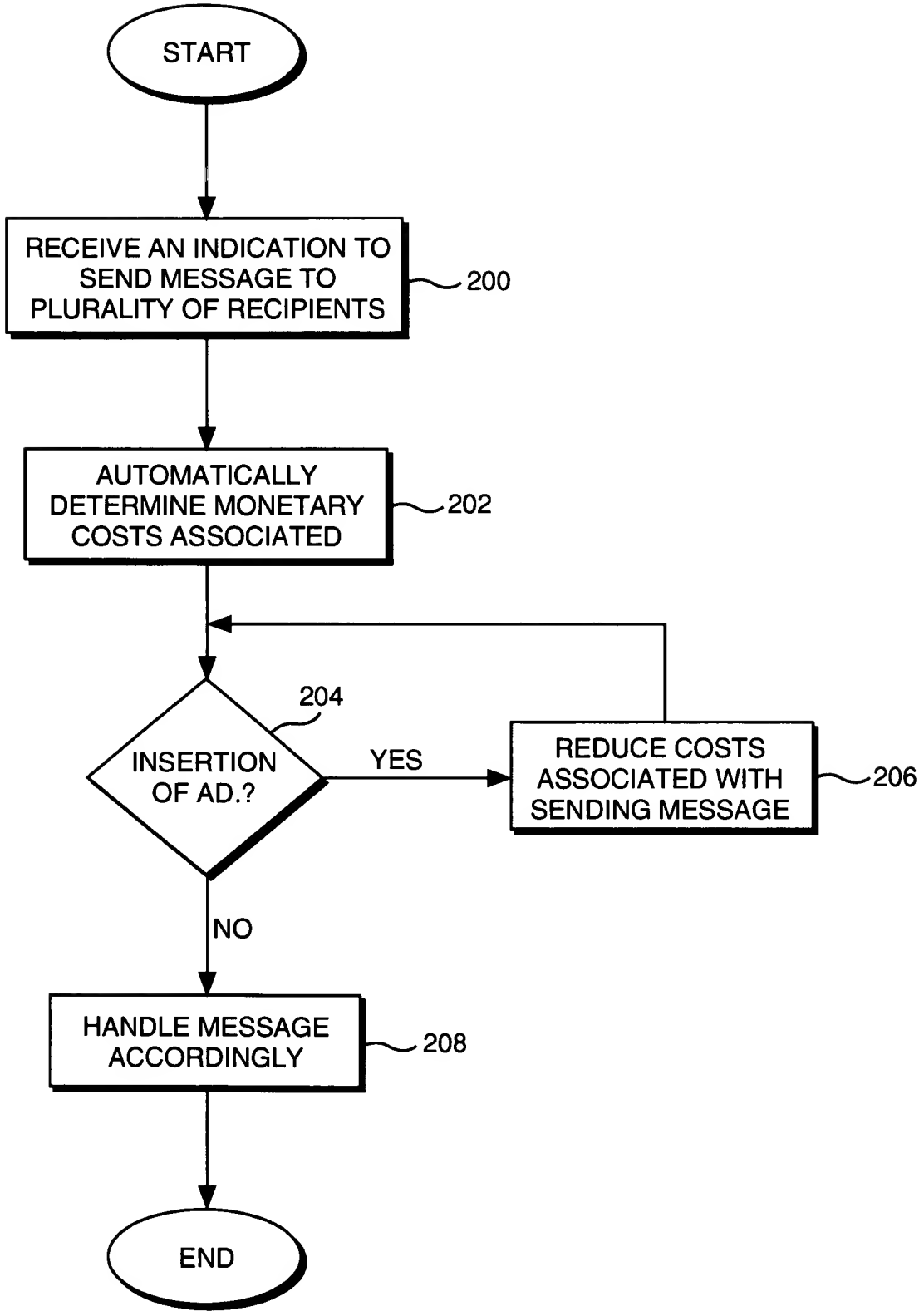
ADVERTISER TABLE ~ 172

ADVERTISER ID ~ 174	ADVERTISER NAME ~ 176	CATEGORY ID ~ 178	FINANCIAL DATA ~180	VALUE FOR ADVERTISER ~ 182	OTHER DATA ~184
1J283T	JOHNSON	MEDICINE FOR CHILDREN			

ADVERTISEMENT TABLE ~ 186

ADVERTISEMENT ID ~ 188	ADVERTISER ID ~ 190	LINK TO AD ~ 192	INCLUSION AND VIEWING STATISTICAL DATA ~ 194	VALUE OF AD ~ 196	OTHER DATA ~ 198

FIG. 12


START
RECEIVE AN INDICATION TO SEND MESSAGE TO PLURALITY OF RECIPIENTS
200
AUTOMATICALLY DETERMINE MONETARY COSTS ASSOCIATED
202
204
INSERTION OF AD.?
YES
REDUCE COSTS ASSOCIATED WITH SENDING MESSAGE
206
NO
HANDLE MESSAGE ACCORDINGLY
208
END